



**ENVIRONMENTAL AUDIT
FOR
ELECTRONIC CHROME AND GRINDING COMPANY, INC.
9128-32 DICE ROAD
SANTA FE SPRINGS, CALIFORNIA 90670**

Prepared For

**The Certification Board
Metal Finishing Association of Southern California
5000 Van Nuys Boulevard, Suite 300
Sherman Oaks, California 91403**

March 26, 1996

Prepared By

**Pacific Environmental Services, Inc.
13100 Brooks Drive, Suite 100
Baldwin Park, California 91706
(818) 856-1400**



SECTION 1

INTRODUCTION

Pacific Environmental Services, Inc. (PES) conducted an environmental audit of Electronic Chrome and Grinding Company, Inc. (Electronic Chrome), 9128-32 Dice Road, Santa Fe Springs, California 90670. The audit was conducted as part of a demonstration project, sponsored by Southern California Edison (SCE), to develop an environmental certification program for metal finishing facilities in Southern California. Electronic Chrome volunteered their facility to be audited by PES and the involved local and/or state regulatory agencies.

The audit was conducted on December 21, 1995 between 9:00 a.m. and 12:00 p.m., requiring three hours of time onsite. The company had earlier provided to PES an application form for certification which included plot plans, flow diagrams, and responses to a checklist of compliance questions. The audit team included:

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|-------------------------|---------------------------------|
| • M. Dean High, P.E. | SCAQMD Compliance Audit |
| • Aileen Y. Newman, CIH | CalOSHA Compliance Audit |
| • Shao-Hua Lu, P.E. | LACSD and DTSC Compliance Audit |

Electronic Chrome representatives who provided files, answered questions, and led plant tours included:

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|-------------|----------------|
| • Mike Reed | Vice President |
| • Ed Kruck | Foreman |

Other participants included:

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| • Kelly Howard | CalOSHA - Consultant Services |
| • Mohan Nagavedu | SCAQMD |
| • Pete Tolentino | SCAQMD |
| • Suzanne Wienke | LACSD |
| • Bill La Marr | SCE |

The audit encompassed environmental rules and regulations of applicable local, State, or Federal governmental agencies designed to protect the health and safety of employees, the public, and the environment. The audit evaluated Electronic Chrome's records and test reports and included onsite observations by the audit team. No environmental sampling was conducted.



The audit included applicable regulations of the following governmental agencies:

- California Occupational Safety and Health Agency (CalOSHA)
- Department of Toxic Substances Control (DTSC)
- South Coast Air Quality Management District (SCAQMD)
- Los Angeles County Sanitation District (LACSD)



SECTION 2

DESCRIPTION OF FACILITY OPERATIONS AT ELECTRONIC CHROME AND GRINDING COMPANY, INC.

Electronic Chrome is located in the City of Santa Fe Springs, Los Angeles County, California (Figure 2.1). The facility is located at 9128-32 Dice Road (Figure 2.2). The company has 16 employees and has been in business since 1955.

Electronic Chrome has only one major process operation which is hard chrome and mil spec plating. Electronic Chrome has seven chrome plating tanks ventilated and served by four fans and scrubbers located on the roof. The company has one chrome strip tank. The company has a blasting operation and a very extensive machine shop to machine parts to required dimensions. The company has no industrial sewer connection and maintains tight management and control over water reuse within the facility. When necessary, hazardous wastes from tank cleaning or floor cleaning are treated, drummed, and hauled offsite for recycling of chromium.

Electronic Chrome submitted a completed application for certification on December 19, 1995 (Appendix A). A review of the application revealed that Electronic Chrome had most, if not all of the necessary permits, plans, and records, so a field audit was scheduled.

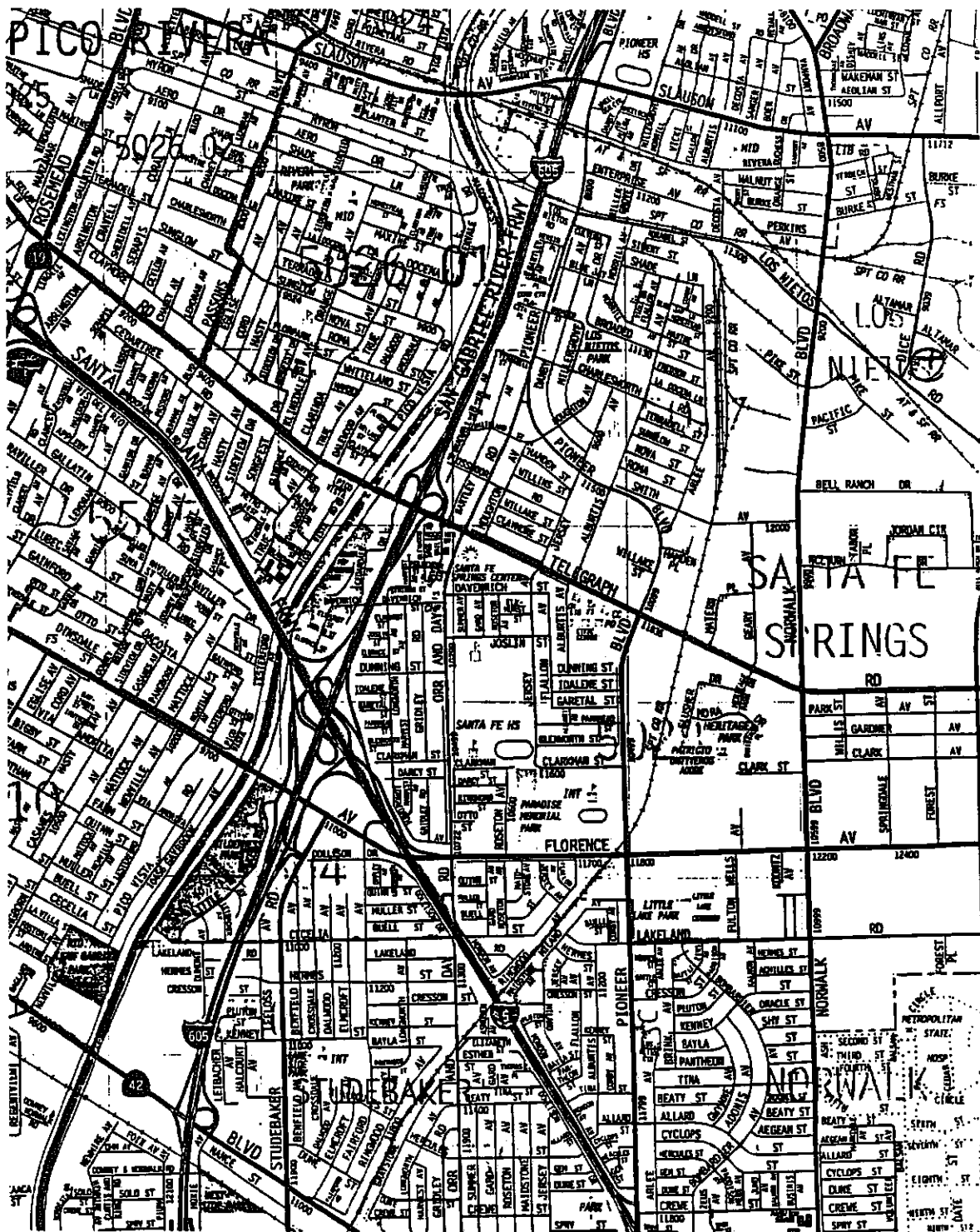


Figure 2.1 Location of Electronic Chrome & Grinding Company, Inc.

LEGEND

- FIRE HYDRANT
- FIRE EXTINGUISHER
- MSDS MSDS STORAGE AVAILABLE
- EVACUATION STAGING AREA
- ELECTRICAL SHUT-OFF
- WATER SHUT-OFF
- SAFETY SHOWERS - EYE WASH
- NON SPRINKLED BLDG.
- HMS HAZARDOUS MATERIAL STORAGE
- SD ORGANIC SOLVENT
- GAS SHUT-OFF

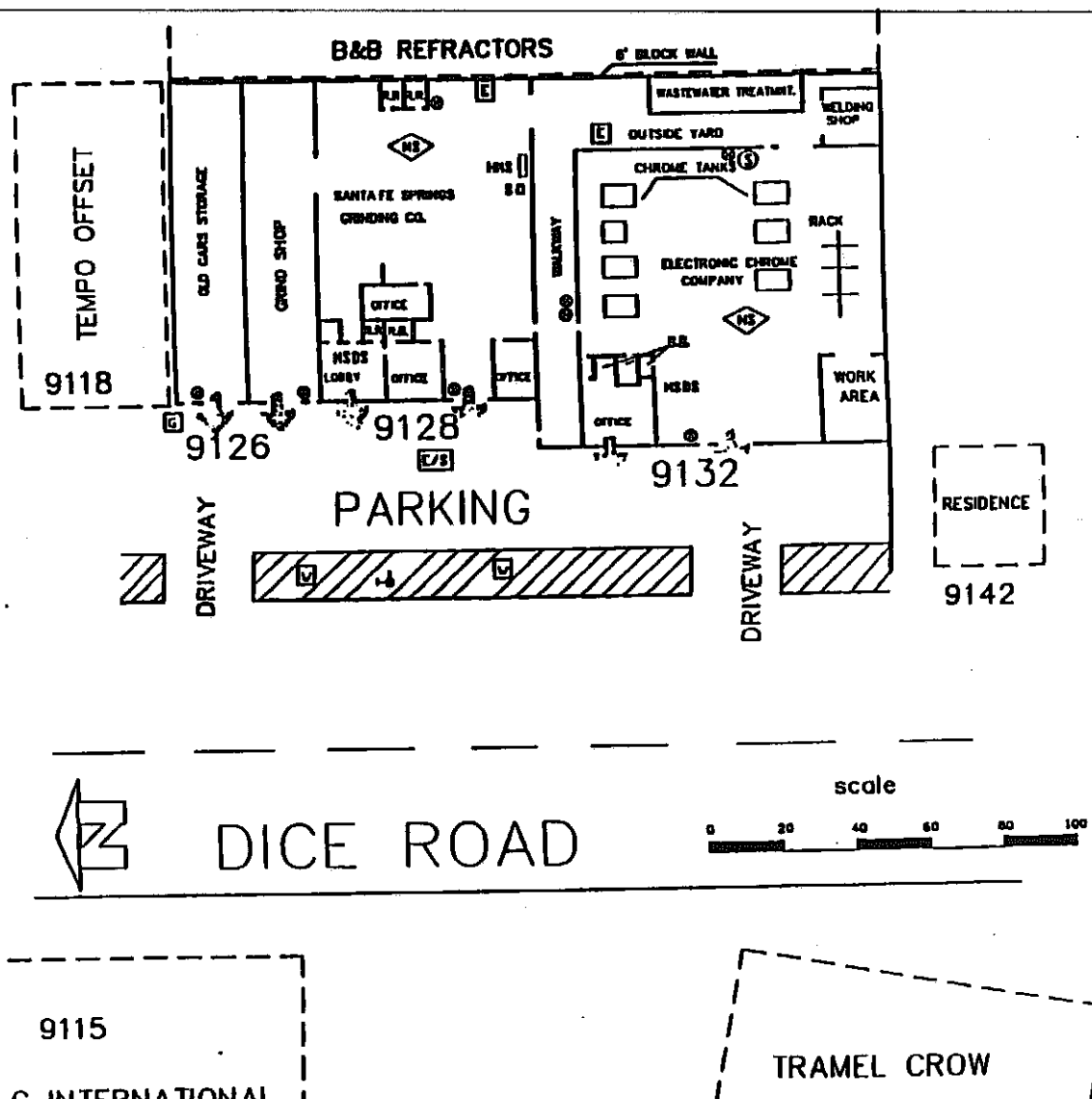


Figure 2.2 Site Plan



SECTION 3

FIELD AUDIT OF ELECTRONIC CHROME AND GRINDING COMPANY, INC.

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH AGENCY

Industrial Hygiene and Safety Program

Electronic Chrome has written programs in place as required and should now focus on ongoing management of these programs. This includes annual training and medicals.

The following items were noted during the audit and should be corrected.

1. Open Tank: A solid cover (or guard rails) should be placed over (or around) the muriatic acid tank when not in use.
2. Guarding of Equipment: A guard should be positioned over the belt on the small lathe.
3. Confined Space Program: The area under the plating tanks is considered a "confined space." If employees are required to enter this area, a Confined Space Program must be in place.
4. OSHA Form 200 (Injury/Illness): Maintain an OSHA 200 form to include both plating and grinding personnel. Every year prepare the summary section of the form; post it no later than February 1, and keep it posted where employees see it until March 1.
5. Eating in the Work Area: The employee eating area should be separated from the work area where hazardous chemicals are handled. In addition, the surfaces should be kept clean.

If outside contractors are being utilized to perform this work, they should be provided a copy of the company safety program. Electronic Chrome must appraise contractors of the potential hazards and ensure that the contractor has a Confined Space Program (written and followed).



CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

The major applicable environmental programs which are administrated by DTSC are hazardous waste practice and Tiered Permitting Program. Electronic Chrome operates an onsite wastewater pretreatment unit which is permitted under the Tiered Permitting Program as Permit-By-Rule (PBR) category. The pretreatment unit has zero water discharge and, therefore, does not have a discharge permit from the LACSD.

Hazardous Substance Handling Practice

Several motor oil/waste oil containers were stored indoors without secondary containment. Most of the containers had no labels. Certain methyl ethyl ketone (MEK) and Fumetrol 101 containers were stored openly in several places. The sludge generated from the wastewater pretreatment unit was stored outdoors without a label and accumulation date.

There is an underground storage tank permit issued by the Los Angeles County Department of Public Work on file. The land disposal restriction notifications were maintained in the file. The certifications of treatment/recycling were kept with appropriate hazardous waste manifests. Electronic Chrome is exempt from the EPA Form R reporting and NPDES Storm Water Permit requirements. A Business Emergency Plan was kept on file. There is a written operating manual for the wastewater pretreatment unit.

Tiered Permitting Program

Electronic Chrome operates one wastewater pretreatment unit under the PBR category.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Equipment Permits

Electronic Chrome had SCAQMD permits for all equipment which required permits with one exception. One chrome plating tank (Tank 6) had not been renewed by SCAQMD since 1993. A request was made by Electronic Chrome to reinstate the permit. Permits are listed below:

- M35673 - Acid Strip Tank
- D03064 - Plating Tanks 1 and 2
- P52717 - Plating Tank 3
- M35675 - Plating Tank 4
- P55637 - Plating Tank 5
- P69637 - Plating Tank 6 (not renewed in 1994 or 1995)



- M35674 - Plating Tank 7
- M13181 - Plating Tank 8
- P69636 - Scrubber
- M00214 - Scrubber
- M13183 - Scrubber
- M35676 - Scrubber

Permit Conditions

Electronic Chrome is required to keep records weekly of ampere-hours used and additions of Fumetrol 101 on each chrome plating tank. The shop has a maximum plating limit of 151,333,333 AH/yr. The tanks must not be operated unless they are ventilated to the scrubbers. Electronic Chrome is complying with the all permit conditions.

Primary Emissions

Electronic Chrome does not have any sources of VOC, NO_x, SO_x, CO, or PM₁₀.

Toxic Emissions

The only toxic emission subject to SCAQMD rules is hexavalent chromium. It is limited by Rule 1169; compliance is met with use of Fumetrol 101 and polyballs in the tank and scrubber systems on the ventilation exhausts.

Records

Records for the chrome plating tanks were current and complete for ampere-hour readings and Fumetrol 101 additions: maximum ampere-hour usage is only about 40,000,000 AH/yr.

LOS ANGELES COUNTY SANITATION DISTRICT

Electronic Chrome operates a pretreatment unit with zero discharge. Therefore, LACSD has no jurisdiction at Electronic Chrome.



SECTION 4

CONCLUSIONS AND RECOMMENDATIONS

The conclusions which follow are organized by the four agencies whose rules applied to Electronic Chrome.

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH AGENCY

Electronic Chrome should correct the deficiencies noted earlier and review the individual programs to ensure that training, testing, and medical surveillance requirements are up to date.

CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCE CONTROL

Electronic Chrome is in compliance with the Tiered Permitting Program. Chemicals should be stored in a centralized area. Waste drums should be properly labeled and the accumulation date should be recorded.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Electronic Chrome had all required permits for air emission sources and control equipment except for one chrome plating tank (Tank 6). The company complies with permit conditions and Rule 1169 emission limits. Record keeping for the chrome plating tanks is complete and current.

LOS ANGELES COUNTY SANITATION DISTRICT

Electronic Chrome operates a pretreatment unit with zero discharge and is, therefore, not impacted by the LACSD.